

51

SPLIT

| | | |
|--|---------------------|--------------------|
| DART AEROSPACE LTD | Work Order: | 21966A |
| Description: 3" Skidtube Heavy "I Beam" | Part Number: | D2600-7-140 |
| Dwg: D2600 Rev. D1 | Qty: | 54 2293 |
| | | Page 1 of 1 |

| Step | Location | Procedure | By | Date | Qty |
|------|----------|---|-----|----------|-----------------|
| 1 | DC | Issue Traveler | HA | 04.11.25 | 2293 |
| 2 | PG | Issue P/O: <u>700796</u> a) Extrude as per Dwg D2600 b) Material: 6061-T6 (QQ-A-200/8) c) Minimum yield tensile strength = 35 ksi d) Minimum ultimate tensile strength = 40 ksi e) Minimum elongation = 8% f) Order at 140" long g) Caradon Indalex Tool # MS-18872 h) To be packed per DSK 066 i) Pull test to ASTM standard B221 required. j) Material certification is required | W | 04.11.25 | 93 |
| 3 | RG | Receive and Inspect for transit damage Ensure certification is attached | CL | 04/12/17 | 54 |
| 4 | QC6 | Inspect dimensions as per Dwg D2600 Check Pull test as per Dwg D2600 for compliance page attached. Check hardness with Webster tester | DP | 05-01-04 | 54 |
| 5 | ST | Identify and Stock | DP | 05-1-4 | 54 |
| 6 | AC | Cost / part: <u>36.98</u> | SUC | 08/01/05 | 54 |
| 7 | DC | Close W/O <u>36.98</u> Inspect Level 21 | HA | 05.01.06 | 54 |

| Rev | Date | Change | Revised By | Approved |
|-----|----------|-----------|------------|----------|
| A | 04.11.25 | New Issue | KJ/RF | RF |

RELEASED
04.11.25 7F

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|---------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Mfg / Design Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|----------------------------------|----------------|---------------------------|------------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Design Mgr | Approval QC Inspector |
| | | | Initial Design Mgr | Action Description Design Mgr | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____



| | | | |
|----------------------|-----------------------|---|------------------------|
| DESIGN <i>DR</i> | DRAWN BY <i>DR</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>KE</i> | APPROVED <i>AS</i> | DRAWING NO. D2600 | REV. D SHEET 1 OF 5 |
| DATE 98.08.20 | | TITLE EXTRUSION | SCALE 1:1 |
| A | 97.01.21 | NEW ISSUE | |
| B | 97.09.09 | CHANGE MATERIAL SPEC. | |
| C | 98.04.16 | ADD D2600-3, UPDATE D2600-1 WIDTH, ADD DIE NO. | |
| D | 98.08.20 | INCREASE MIN. UTS TO 40 KSI | |
| DI | 01.04.17 | ADD PART NUMBERS + DIE NUMBERS <i>FCP</i> | |

RELEASED
98.08.25 DS

GENERAL NOTES

- MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 40 ksi
MINIMUM ELONGATION = 8 %

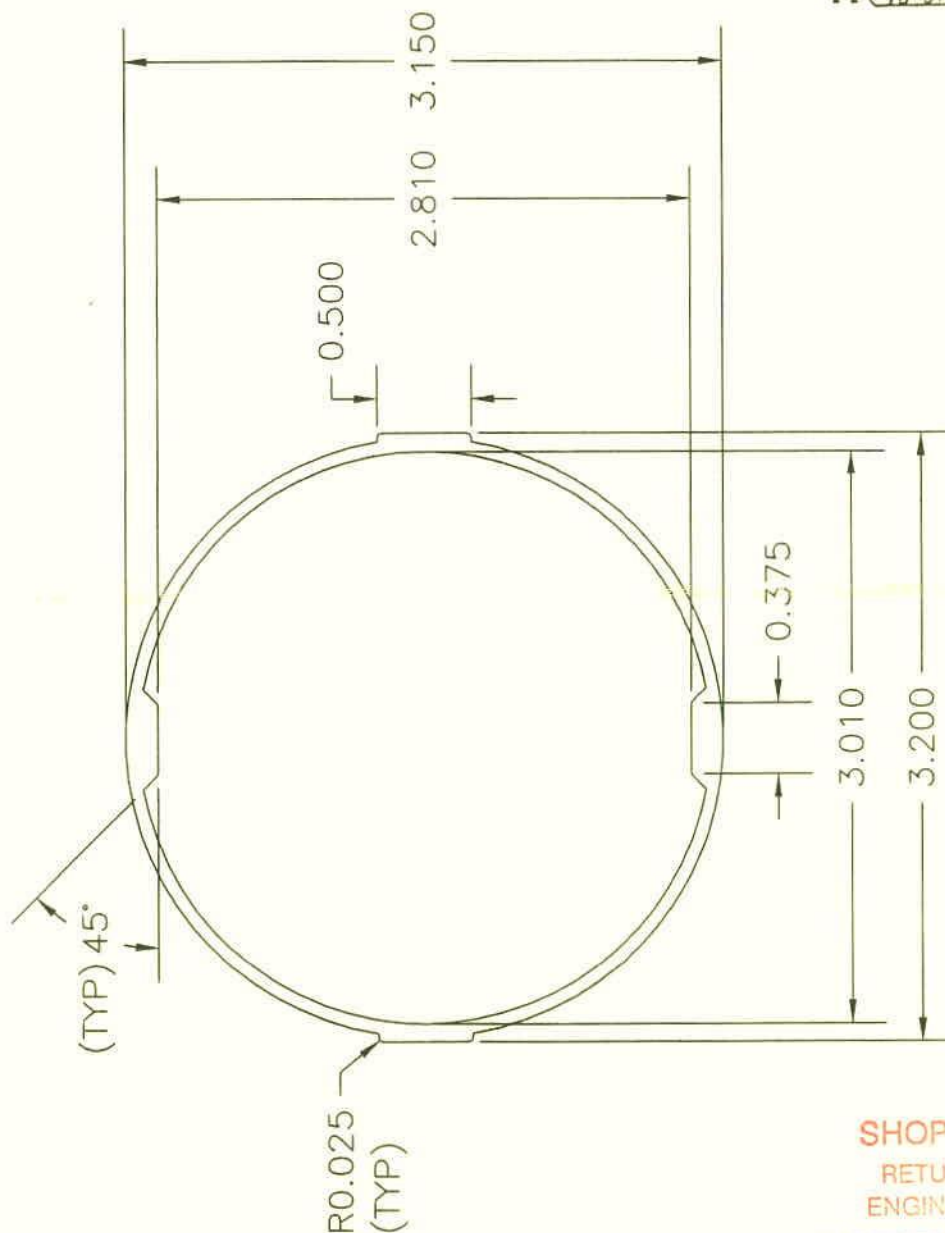
A SAMPLE FROM EACH BATCH WILL BE PULL TESTED
TO ASTM STANDARD B221 BY AN APPROVED TESTING
FACILITY TO ENSURE THAT THE BATCH MEETS THE
ABOVE MINIMUM MECHANICAL PROPERTIES.
- BREAK ALL SHARP CORNERS 0.010 MAX.
- NO TOOLING MARKS.
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE
NOTED.
- ALL DIMENSIONS ARE IN INCHES.

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SUSCEPT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 21966



| | | | |
|----------------------|-----------------------|---|------------------------|
| DESIGN <i>DA</i> | DRAWN BY <i>DA</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>KE</i> | APPROVED <i>JA</i> | DRAWING NO. D2600 | REV. D SHEET 2 OF 5 |
| DATE 98.08.20 | | TITLE EXTRUSION | SCALE 1:1 |

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98.8.25 DS



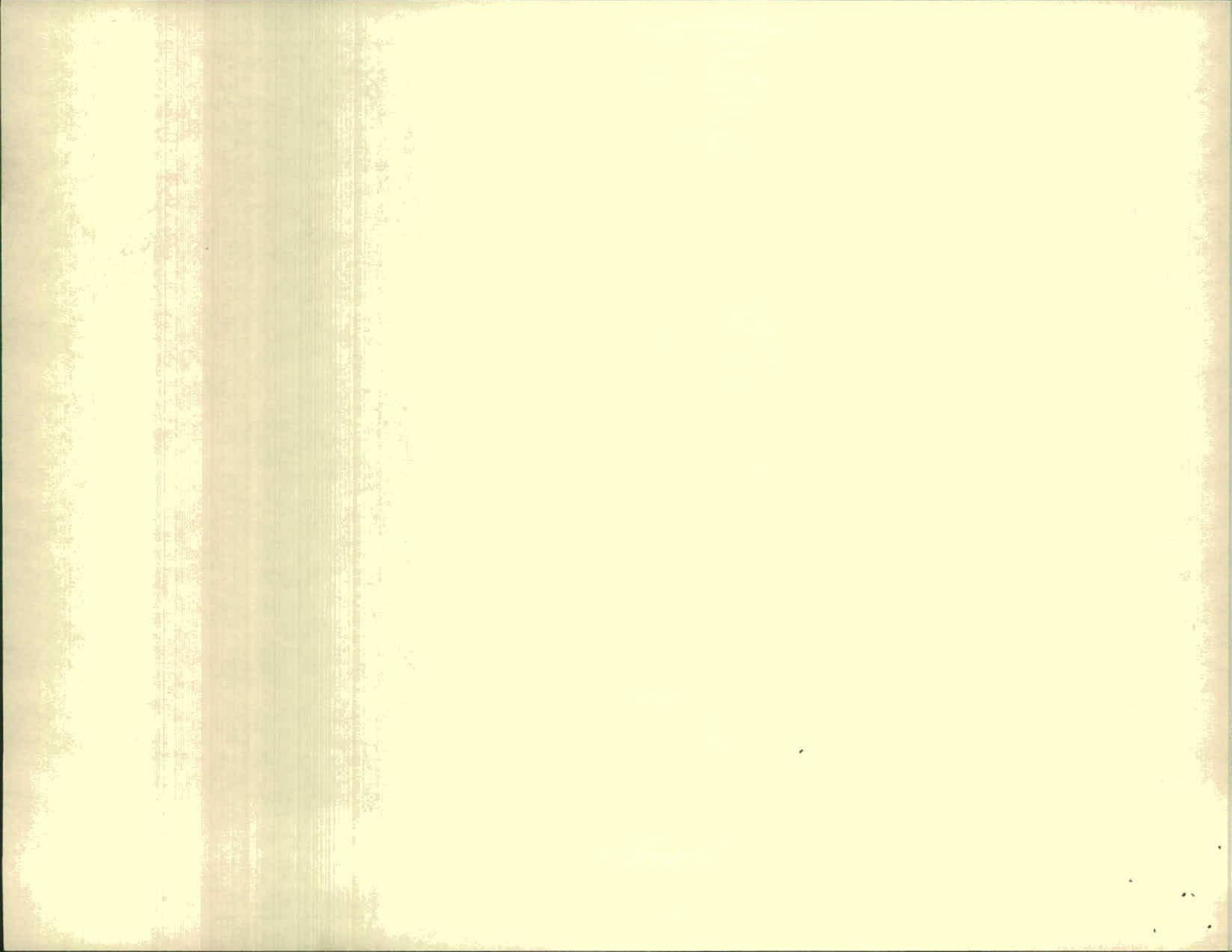
D2600-1

MANUFACTURED WITH CARADON INDALEX DIE # MH-18870
OR BON L DIE # 897121 (PREFERRED CHOICE)
PART NUMBER IS D2600-1-XXX WHERE XXX IS CUT LENGTH IN INCHES (EG. D2600-1-160 IS 160" LONG)

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WITHOUT NOTICE

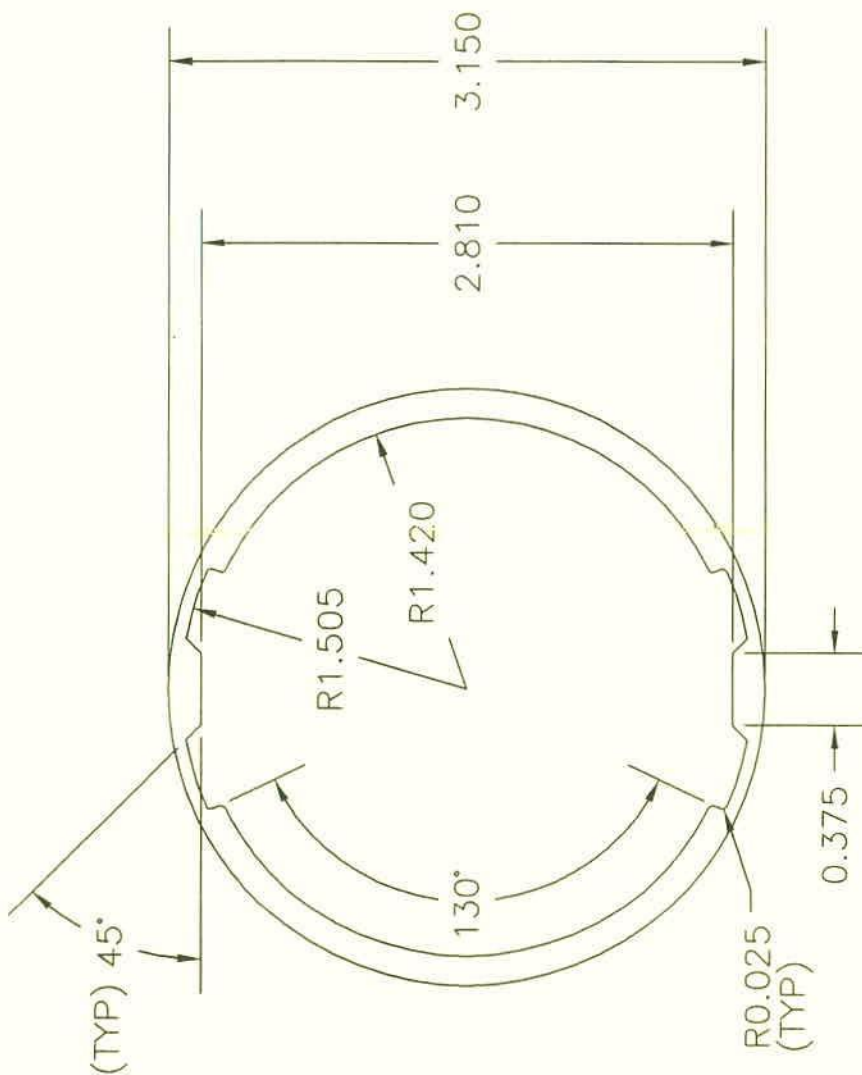
WORK ORDER
NO. 21966





| | | | |
|----------------------|------------------------|---|------------------------|
| DESIGN <i>DIP</i> | DRAWN BY <i>DIP</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>KE</i> | APPROVED <i>JA</i> | DRAWING NO. D2600 | REV. D SHEET 3 OF 5 |
| DATE 98.08.20 | TITLE EXTRUSION | | SCALE 1:1 |

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98.8.25 DS



D2600-3

MANUFACTURED WITH CARADON INDALEX DIE # MH-18859

OR BON L DIE # 897122 (PREFERRED CHOICE)

PART NUMBER IS D2600-3-XXX WHERE XXX IS CUT LENGTH IN INCHES (EG. D2600-3-120 IS 120" LONG)

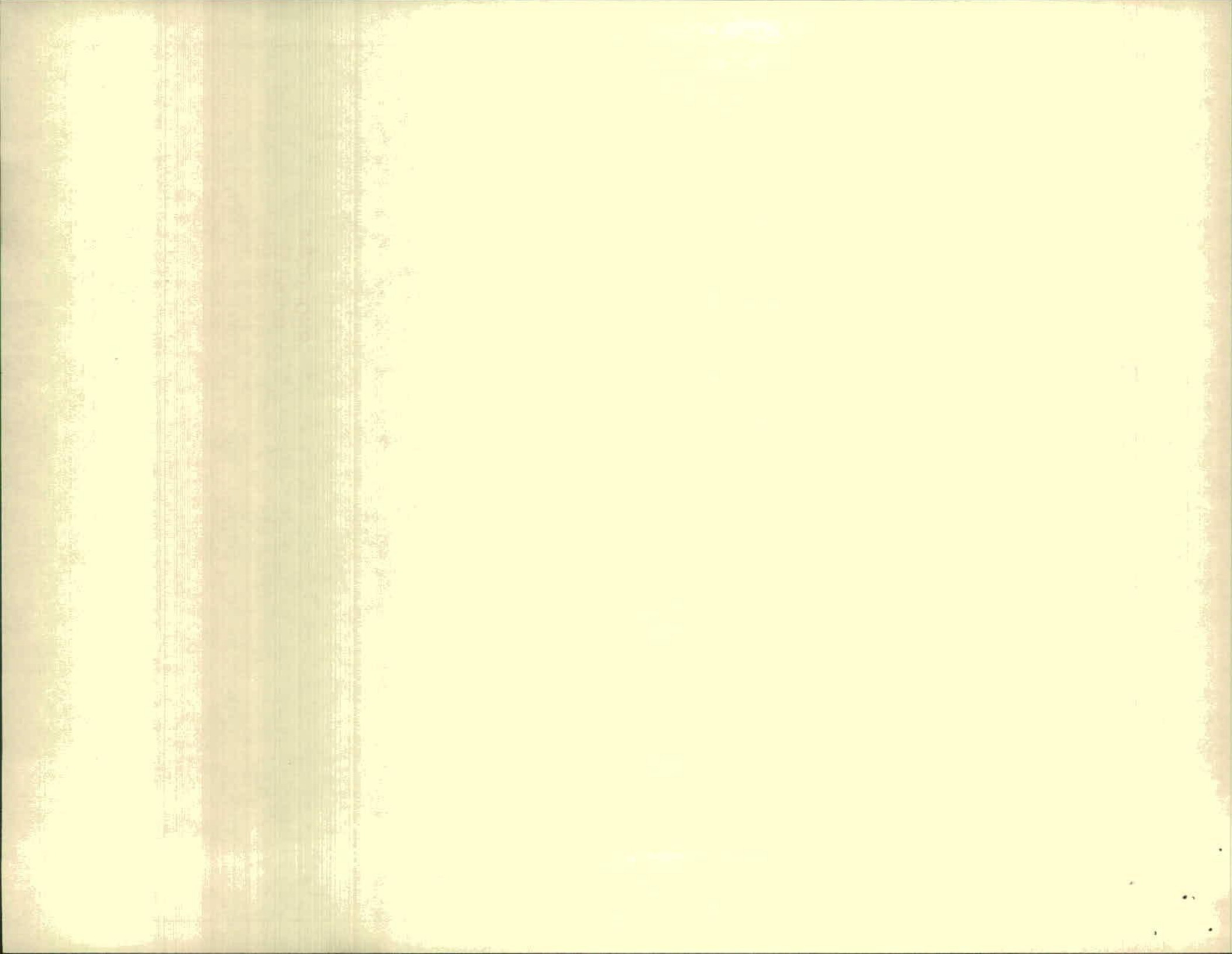
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WITHOUT NOTICE

WORK ORDER

NO. 21966

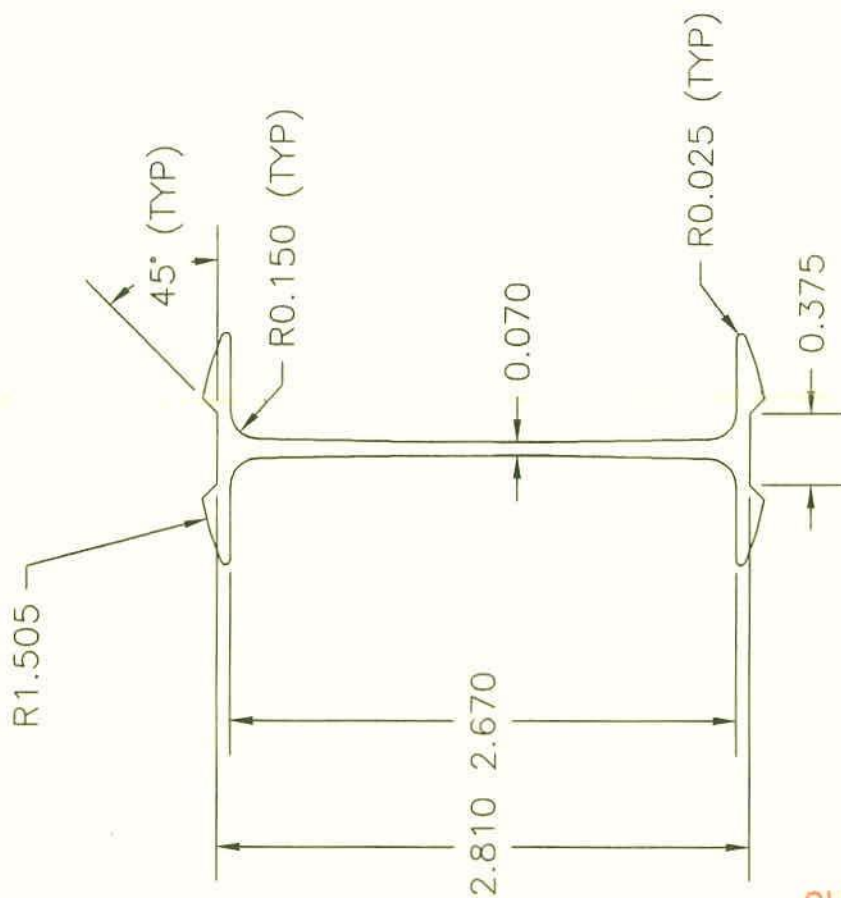






| | | | |
|----------------------|-----------------------|---|------------------------|
| DESIGN <i>ME</i> | DRAWN BY <i>ME</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>KE</i> | APPROVED <i>KE</i> | DRAWING NO. D2600 | REV. D SHEET 4 OF 5 |
| DATE 98.08.20 | | TITLE EXTRUSION | SCALE 1:1 |

RELEASED
98.8.25 DS



D2600-5

MANUFACTURED WITH CARADON INDALEX DIE # MS-18871

PART NUMBER IS D2600-S-XXX WHERE XXX IS CUT LENGTH IN INCHES
(EG. D2600-S-108 IS 108" LONG)

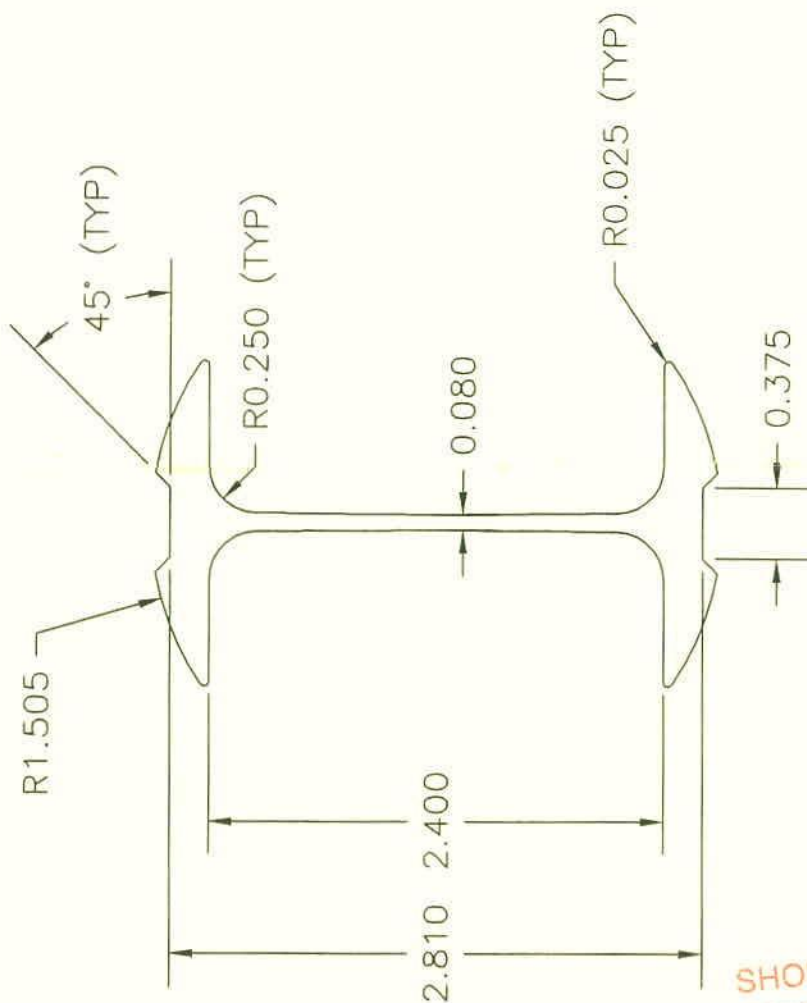
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WORK ORDER
NO. 21966





| | | | |
|----------------------|-----------------------|---|------------------------|
| DESIGN <i>RA</i> | DRAWN BY <i>RA</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>KE</i> | APPROVED <i>AS</i> | DRAWING NO. D2600 | REV. D SHEET 5 OF 5 |
| DATE 98.08.20 | | TITLE EXTRUSION | SCALE 1:1 |

RELEASED
98.8.25 DS



D2600-7

MANUFACTURED WITH CARADON INDALEX DIE # MS-18872
PART NUMBER IS D2600-7-XXX WHERE XXX IS CUT LENGTH IN INCHES
(EG. D2600-7-125 IS 125" LONG)

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WORK ORDER

NO. 21966



Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Nov 25, 2004
10:58 am

Work Order No : 0021966
Project Name : D2600-7-140
Project For : WK451
Work Order Type : Main
Main WO Number :
House Part Number : D2600-7-140
Description : EXT. "I BEAM" THICK
Manufactured : Yes
Amount Req'd : 80
Amount Done : 0
Start Date : 11-25-04
Est Finish Date : 12-11-04
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Margin : 0.000%
Actual Margin : 0.000%
\$0 Posted to Finished Goods

| | Estimated | Actual | Var. % | Posted | To Post |
|---------------------|-----------|--------|--------|--------|---------|
| Material Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Engineering Hours : | 0.00 | 0.00 | 0.00 | | |
| Engineering Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Production Hours : | 0.00 | 0.00 | 0.00 | | |
| Production Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Packaging Hours : | 0.00 | 0.00 | 0.00 | | |
| Packaging Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| OverHead Hours : | 0.00 | 0.00 | 0.00 | | |
| OverHead Cost : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CNC Hours : | 0.00 | 0.00 | 0.00 | | |
| CNC : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Misc. Hours : | 0.00 | 0.00 | 0.00 | | |
| Misc. : | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Burden : | 0.00 | 0.00 | 0.00 | | |
| Total Cost : | 0.00 | 0.00 | 0.00 | | |
| Margin : | 0.000 | 0.000 | | | |
| Selling Cost : | 0.00 | 0.00 | | | |

| | Estimated | Actual |
|--------------------------|-----------|--------|
| Labour Hrs/Amount Done : | 0.00 | 0.00 |
| Profits/(Loss) : | 0.00 | 0.00 |



P/S#: 462128

NOTRE NUMERO DE COMMANDE
OUR ORDER NO.

4113326 1

K6A1K7

CUSTOMER P.S.T. : *6122-5207

INDALEX G.S.T. REG NO: R136834041

Required Date:

[illegible]

4/12/16

OTTAWA 17 DEC.

[illegible][illegible]

EXEMPLAIRE DE LA COMPTABILITÉ
ACCOUNTING COPY

FEUILLE D'EMPAQUETAGE
PACKING SLIP



325 rue Avro
Pointe-Claire QC H9R 5W3

Téléphone (514) 697-5120
Fac-simile (514) 694-8310

Rapport des propriétés mécaniques Mechanical Properties Test Report

Client / Customer : **DART AEROSPACE LTD**
Adresse / Address : **1270 ABERDEEN STREET**
HAWKESBURY ONT,
K6A 1K7

commande Indalex / Indalex order # : **4113326**

bon de commande / Purchase order # : **2007196**

de matrice / Die # : **MS 18872** Description : **D-2600-7 Heavy Duty Web**

Alliage & trempage / Alloy & temper : **6061 T6**

de coulée / Cast # : **04111981A**

de contrôle / Control # : **73756-2**

Composition chimique typique / Typical chemical composition :

Si:0.50-0.70/ Fe:0.13-0.25/ Cu:0.15-0.25/ Mn:0.10max / Mg:0.80-1.00 / Cr:0.04-0.14 / Zn:0.05max / Ti:0.05max

Dureté Rockwell E / Rockwell E Hardness : **89 HRE**

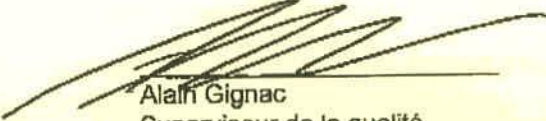
| | Min.requis Min.required | Résultat actuel Actual results |
|--|----------------------------|-----------------------------------|
| Contrainte élastique Yield stress (psi) | 35 000 | 35011 |
| Tension ultime Ultimate stress (psi) | 38 000 | 38344 |
| % élongation dans 2" % elongation in 2" | 8 | 9 |

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par l'Association de l'Aluminium ainsi que les exigences de nos procédures de contrôle de qualité.

We hereby certify that the material supplied meets the chemical properties as published by the Aluminum Association, and requirements of our quality control procedures.

Sincèrement vôtre,
Yours truly,

date : 15/12/04


Alain Gignac
Superviseur de la qualité
Quality Supervisor

Indalex Limited

